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cc: "Hall, Mark (DEQ)" <mahall@mt.gov>

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Date: Tuesday, February 13, 2007 11:20PM
Subject: Asarco - DEQ's CAMU Comments

Linda,

I am sending you a letter with the Department's comments on Asarco's Design Analysis Report for the Phase 2 CAMU Cell. For your convenience, listed below are the Department's comments. Please do not forward these comments directly onto Asarco until we have had a chance to discuss them. I would especially like to discuss with you comment #10.

1. **Section 2.3 Leachate Collection and Removal System:** Asarco states that the leachate collection and removal system shall be constructed with a bottom slope of one percent or more. As part of Asarco listing the performance standards for hazardous waste landfills, Asarco states that the CAMU Phase 2 Cell is designed to comply with the Administrative Rules of Montana (ARM) 17.50.506. ARM 17.50.506(6)(b) states that a leachate collection and removal system must be designed and constructed to ensure that the minimum slope at the base of the overlying leachate collection layer is at least 2% and side slopes do not exceed 33% when a compacted soil liner or recompacted natural lithology is used as the barrier layer.
2. **3.5 Soil Materials:** The initial clay liner of the CAMU Phase 1 cell was rejected because Asarco was not able to meet the compact clay liner specifications requiring no cobbles and rock fragments having a maximum dimension of more than 2-inches. A screening plant was required to sort and screen the native material to achieve this standard. The Phase 2 Design Analysis Report does not discuss a screening plant for construction of the CAMU Phase 2 cell. Asarco must explain how Asarco intends to meet the Phase 2 specifications for the compact clay liner without screening.
3. **3.5 Waste Material:** It is the Department's understanding that Asarco will be disposing of asbestos in the CAMU Phase 2 Cell. Asbestos regulations require specific management practices. Will Asarco be disposing of asbestos containing material in a separate cell within the CAMU Phase 2 Cell? Asarco must comply with the Department's *Montana Asbestos Work Practices and Procedures Manual*. Asarco must include in the work plan a description of how asbestos will be managed; simply citing the applicable regulations is inadequate.
4. **3.5 Waste Material:** Asarco should identify the waste material intended for disposal in the CAMU that Asarco suspects may be of extreme pH that will require neutralization.
5. **Table 3-3 Major Demolition Debris Waste Material Quantities:** The table includes 2000 cubic yards from "Excavation for Plant Cap." It is not clear to the Department the meaning of this category since a final site remedy has not been approved by EPA. The Department's approval of the CAMU Phase 2 cell plan does not constitute approval of any plant cap.
6. **Table 3-3 Major Demolition Debris Waste Material Quantities:** The table includes a category "Remediation of Property for Chemet." Asarco must explain this category that is slated to generated 5000 cubic yards of waste.
7. **Table 3-3 Major Demolition Debris Waste Material Quantities:** The table includes a category "Sanitary Treatment." Asarco must explain this category.
8. **Table 3-3 Major Demolition Debris Waste Material Quantities:** The table list "HDS waster treatment." Asarco should be reminded that a final remedy has not been selected for this site and corrective action may not

be completed by 2009. Asarco will be required to long-term treat groundwater purged for sampling and may be required to treat storm water.

9. Section 3.5.5 Groundwater Monitoring System: A groundwater sampling and monitoring plan was not submitted. This is a deficiency of the design report.

10. Section 4.0 Placement of Waste Soils, Sediments and Demolition Debris in Cell: The Department strongly believes that the CAMU design must include protection of the liner system. The geotextile and geonet may not be sufficient to protect the liners given the nature of the waste to be placed in the cell. The Department believes at least 12 inches of gravel should be use to protect the bottom and sides of the cell.

Asarco states that 12 inches of crushed concrete or brick will be used as a cushion layer to protect the liner systems against puncture. This section indicates that concrete and brick will be crushed on-site to 3/8 inch minus. This proposal may be sufficient to protect the liner. However, the treatment of waste in this manner requires further clarification to ensure compliance with all applicable requirements.

The Department assumes that Asarco intends to have equipment on-site that can produce material to this specification. If Asarco is going to treat concrete and brick that may be a hazardous waste, Asarco must provide additional information regarding the process. Asarco must describe the type of crushing equipment to be used and the location the equipment will operate.

If Asarco contends the any treated waste is non-hazardous, a sampling plan to characterize the waste must be submitted to the Department.

11. Section 4.0 Placement of Waste Soils, Sediments and Demolition Debris in Cell: Asarco states a dust control program will be required. Asarco must submit the dust control program to the Department prior to commencing construction of the CAMU.

12. Section 5.0 Temporary Closure and Monitoring: An Operation and Maintenance Plan to address temporary closure activities of the CAMU was not submitted. This is a deficiency of the design report.

13. Section 6.0 Final Closure and Monitoring: An Operation and Maintenance plant to address post closure of the CAMU after capping was not submitted. This is a deficiency of the design report.

14. General Comment: The report must include a plan for submitting a final construction report for the CAMU Phase 2 cell.

Sincerely,

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